

REMARKS

This is responsive to the Office Action mailed June 6, 2006. Accordingly, it is accompanied by a petition to extend the time for response 1 month together with the required fee.

Information Disclosure Statement

The Office Action indicates, apparently referring to Applicant's IDS, that "[I]t has been placed in the application file, but the information referred to therein has not been considered." Applicant respectfully submits that the entire IDS should not have been dismissed because two non-English language references were cited without the explanation required by 37 CFR 1.98(a)(3). In case it has, it is being resubmitted herewith with those references cancelled.

Regarding the two non-English language references, so far as is known, the reference DE 196 23 507 is relevant only to claims that were not elected in the present application. So, it is applicant's intention now to submit this reference in a new divisional application drawn to the non-elected claims.

The reference FR 2760674 was cited by a European patent examiner for the proposition that a knife having dual linear cutting edges was known in the art. This proposition is not controversial, is well known from many English language sources, is probably well known to the Examiner, and in any case is believed to not be material to patentability of any claim pending in the present application.

Section 102 Rejections

Claims 30 - 32 and 38 - 43 stand rejected under 35 USC §102(b) as being anticipated by

Hult, U.S. Patent No. 5,201,352. The Examiner asserts as a premise for the rejections that the “cut-out part 2” is a curvilinear cutting edge as claimed. Applicant respectfully traverses the rejections. Hult describes a cutting edge 3 and a cut-out part 2. From the description, it is clear that these are different parts, one being adjacent to the other:

The tooth 1 . . . essentially has a triangular shape. . . . Tips 4, 5, 6 of the triangle are cut in such a way that the forwardly located edge 3 . . . of the tip 4 will be located a slight distance *h* further away from the base B than the backwardly located edge 7 of the cut-away tip. The forward corner 3 at the cut-away part of the tip 4 . . . obtained in this way will define a cutting edge. *A cut-out part 2 is formed adjacent this cutting edge . . .*” (emphasis added).

Hult states that the cut-out portion 2 is adjacent, and therefore not part of, the cutting edge 3. But the cutting edge 3 in Hult is linear, not curvilinear or concavely shaped as required by the claims. Accordingly, Hult does not anticipate any of the claims.

However, Applicant notes that the tooth in Hult is entirely of the same thickness, as stated in Col. 2, lines 43 - 49 and shown in Figure 2. Therefore, there is arguably no distinction, based on structure alone, between a cutting edge and any other edge of the tooth in Hult. On the other hand, as shown in the present application, some sort of beveled face defining an acute attack relief angle (γ) terminating in the cutting edge (e.g., CE₄ in Figure 16A) is necessary to define a useful cutting edge. This angle inherently defines the sharpness of the cutting edge.

It may be noted that the term “attack relief angle” is not a term of art and is intended to be suggestive of the fact that the underside (e.g., 60a in Figure 16B) of the knife is an “attack” side, and the opposite side (e.g., 60b) is a “relief” side, the “attack relief angle” (γ) being the angle therebetween. This is not to be confused with different angles known in the art as “attack” angles, and “relief” angles.

Claims 30 - 48 are also rejected as being anticipated by Nakayama et al., U.S. Patent No. 5,188,488. However, Nakayama is shaft-like end mill having very different geometry from that of a cutting blade used in a planer head. For example, it appears that in the cross-section shown in Figure 3 (annotated by the Examiner), there are no curvilinear cutting edges. In any case, these edges do not exist in reality--they are merely cross-sectional views of the end mill.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Garth Janke', written over the printed name.

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In the Drawings:

Figure 16B is amended as shown in the Replacement Sheet, adding the cutting edge CE_4 shown in Figure 16A.

Figure 17A is amended as shown in the Replacement Sheet, changing the reference γ_L to Δ , and adding the reference γ .